

-15-

Claims

What is claimed is:

*July 91*

1. An operator interface system for a work machine operable for acceleration or deceleration either in a forward or reverse direction, comprising:  
a first pedal displaceable from a neutral position;  
10 a sensor operatively coupled with said first pedal and operable to output a displacement signal corresponding to a location of said first pedal; and  
an electronic controller adapted to receive  
15 said displacement signal and to provide a pre-determined control to a velocity aspect of the work machine in response to said displacement signal.
2. The operator interface system as set forth in Claim 1 wherein said velocity aspect of said  
20 work machine includes at least one of said vehicle acceleration or vehicle deceleration.
3. The operator interface system as set forth in Claim 1 wherein said first pedal controls the  
25 work machine's acceleration.
4. The operator interface system as set forth in Claim 1 wherein said first pedal controls the  
30 work machine's deceleration.



-16-

5. The operator interface system as set forth in Claim 1 wherein said first pedal controls the forward movement of the work machine.

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6. The operator interface system as set forth in Claim 1 further comprising:

a second pedal displaceable from a neutral position;

10 a sensor operatively coupled to said second pedal and operable to output a displacement signal corresponding to said displacement of said second pedal from said neutral position; and

15 an electronic controller adapted to receive said displacement signal and to provide a pre-determined control to a velocity aspect of the work machine in response to said displacement signal.

7. The operator interface system as set forth in Claim 6 wherein said second pedal controls the work machine's deceleration.

8. The operator interface system as set forth in Claim 6 wherein said second pedal controls the work machine's rearward movement.

9. The operator interface system as set forth in Claim 6 wherein:

said electronic controller is programmable;

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-17-

said electronic controller includes mapping structures adapted to provide a pre-determined velocity aspect for a given displacement of at least one of said first pedal or said second pedal.

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10. The operator interface system as set forth in Claim 1 wherein said velocity aspect is jerk.

11. The operator interface system as set forth in Claim 1 further comprising a speed selector adapted to selectively control a maximum speed setting of the work machine.

12. The operator interface system as set forth in Claim 1 further comprising a cruise control function.

13. The operator interface system as set forth in Claim 1 wherein said electronic controller is programmable.

14. The operator interface system as set forth in Claim 1 including a brake operatively coupled to said first pedal.

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15. The operator interface system as set forth in claim 14 wherein said brake is actuatable upon said first pedal being displaced a pre-determined distance from said neutral position.

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-18-

16. An operator interface system for a work machine operable for acceleration or deceleration, comprising:

- a prime mover;
- 5 a pedal displaceable from a neutral position;
- a sensor operatively coupled to said pedal and operable to output a displacement signal corresponding to said displacement of said pedal from
- 10 said neutral position; and
- an electronic controller coupling said sensor to said prime mover and adapted to provide a pre-determined deceleration of said prime mover in response to said displacement signal.

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17. The operator interface system as set forth in Claim 16 wherein said prime mover includes a (continuously variable) transmission.

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18. An operator interface system for a work machine, comprising:

- a continuously variable transmission having an output speed; and
- at least one pedal displaceable from a
- 25 neutral position and adapted for controlling said output speed.

19. The operator interface system as set forth in Claim 18 further comprising:



-19-

a sensor operatively coupled to said pedal and operable to output a displacement signal corresponding to the displacement of said pedal; and

an electronic controller coupling said  
5 sensor with said continuously variable transmission and adapted to provide a pre-determined control to a velocity aspect of the work machine in response to said displacement signal.

10 20. The operator interface system as set forth in Claim 19 wherein said electronic controller is programmable.

15 21. The operator interface system as set forth in Claim 19 wherein said electronic controller selectively controls a rate of change of said output speed.

20 22. A method for controlling locomotion characteristics of a work machine, comprising the steps of:

providing at least one pedal displaceable from a neutral position;

sensing a position of said pedal;

25 selecting a pre-determined velocity characteristic of the work machine based on the position of the pedal; and

relaying the pre-determined velocity characteristic to a prime mover of the work machine.

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-20-

23. The method of Claim 22, wherein the prime mover includes a continuously variable transmission.

5           24. The method of Claim 22, wherein the velocity aspect includes at least one of work machine jerk, acceleration, deceleration, or velocity.

10           25. The method of Claim 22 including the step of:  
            providing a second pedal; and  
            wherein one of said pedals controls forward motion of the work machine, and the other of the pedals controls rearward motion of the work machine.

15           26. The method of Claim 22 including the step of:  
            providing a second pedal; and  
            wherein one of said pedals controls  
20   acceleration of the work machine, and the other of the pedals controls deceleration of the work machine.